

Date: Thursday, 3/13/2008 10:20:14 AM
 User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : STEM
Job Number : 37929A	
Estimate Number : 10394	
P.O. Number :	Part Number : D29681
This Issue : 3/13/2008 S.O. No. :	Drawing Number : D2968
Prsht Rev. : NC	Project Number : N/A
First Issue : / / Type : MACHINED PARTS	Drawing Revision : C
Previous Run : 36332A	Material :
Written By : <u>JA 08 03 13</u>	Due Date : 4/4/2008 Qty: 40 Um: Each
Checked & Approved By :	
Comment : Est: C 08.04.11 Reformat, Incorporated D2968-1/-5 KJ/RF est D 07.08.23 rev C dwg EC	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	M4130NR0750	4130, steel rod .750"
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Comment: Qty: 0.4550 f(s)/Unit Total: 18.1986 f(s)

Material: AISI 4130 Ø 3/4" Bar
(M4130N-R0.750)

Batch: 3104452

Identify AS D2968-1

25' 9" SCRAP.

MF SF 08/04/01 14.5'

2.0	HARDINGE	HARDINGE CNC LATHE SMALL
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Comment: HARDINGE CNC LATHE SMALL

1-Turn Blank as per Folio FA047 and Dwg D2968
2-Deburr, no sharp edges

MR/ SF 08/04/01 (40)

3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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Comment: INSPECT PARTS AS THEY COME OFF MACHINE

MR/ SF 08/04/01 40

4.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
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Comment: HAAS CNC VERTICAL MACHINING #1

1- Machine as per Folio FA047 and Dwg D2968
2- Deburr

MR/ H.A 08/04/03 40

5.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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Comment: INSPECT PARTS AS THEY COME OFF MACHINE

MR/ H.A 08/04/03 40

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 3/13/2008 10:20:14 AM
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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: STEM

Job Number: 37929A

Part Number: D29681

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC8

SECOND CHECK



Comment: SECOND CHECK

JS 08/04/04

(40)

7.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

SMA welding.

JS 08/04/04

(40)

8.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/04/08

Job Completion



JS 08/04/04

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	37929A
Description: Stem		Part Number:	D2968-1
Inspection Dwg: D2968 Rev: C		Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

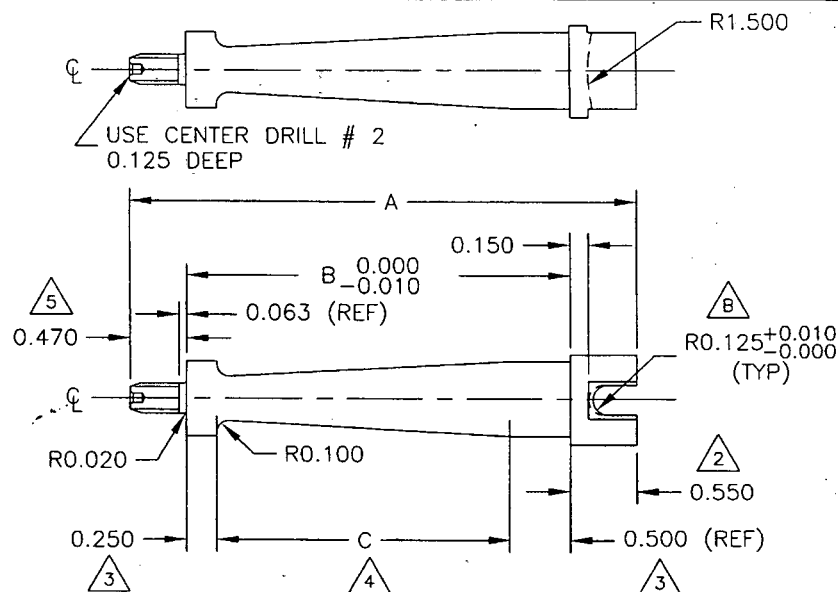
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
5.040	+/-0.010	5.046	✓			
4.020	+0.000/-0.010	4.010	✓			
3.270	+/-0.010	3.270	✓			
0.470	+/-0.010	0.470	✓			
0.250	+/-0.010	0.249	✓			
0.550	+/-0.010	0.552	✓			
Ø0.750	+/-0.010	Ø.747	✓			
Ø0.625	+/-0.010	Ø.622	✓			
Ø0.363	+/-0.010	Ø.364	✓			
0.250	+0.010/-0.000	0.250	✓			
0.625	+/-0.010	0.626	✓			
0.150	+/-0.010	0.150	✓			
1/4-28 Major dia	0.243 - 0.249	0.2462	✓			
R0.125	+0.010/-0.000	R0.125	✓			
MOW	0.261 - 0.267	.2614	✓			

Measured by: *R.A. / J.M.E. / S.F.*
 Date: 08/04/01

Audited by: *DSP*
 Date: 08/04/03

Prototype Approval: N/A
 Date: N/A

Rev	Date	Change	Revised by	Approved
A	04.02.25	New Issue P/O D2968-041	KJ/RF	
B	05.05.26	Dimensions added	KJ/JLM	
C	07.03.21	Dimensions updated	KJ/JLM	
D	07.09.06	Dwg Rev updated	KJ/JLM	<i>[Signature]</i>



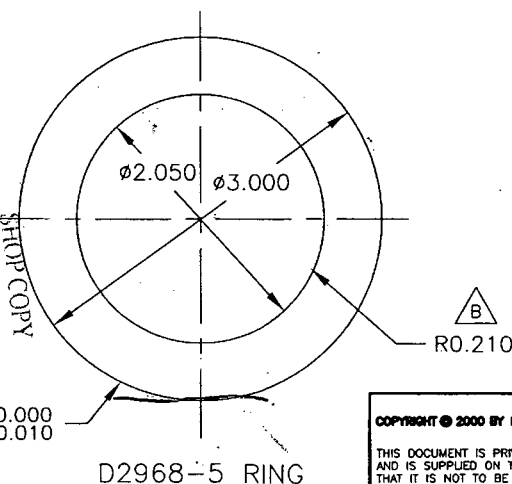
D2968-1/-3 STEM

D2968-1 AND D2968-3 STEM:

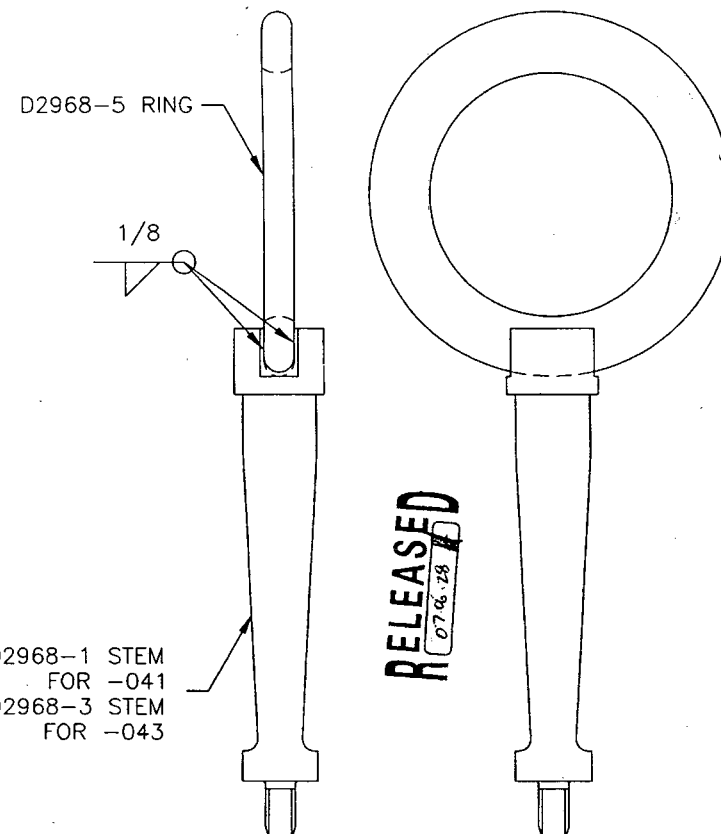
- 1) MATERIAL: AISI 4130N ROUND BAR PER MIL-S-6758
OR AMS 6348/6370/6528
(REF DART SPEC M4130N-RX.XXX)
- 2) $\phi 0.750$ O.D.
- 3) $\phi 0.625$ O.D.
- 4) MACHINE UNIFORM TAPER FROM $\phi 0.363$ O.D.
TO $\phi 0.625$ O.D.
- 5) 1/4-28 UNF THREAD WITH 0.063 GRIP
- 6) MACHINE ALL INSIDE EDGES WITH A 0.010 RADIUS
UNLESS OTHERWISE INDICATED
- 7) ALL DIMENSIONS ARE IN INCHES
- 8) TOLERANCES ARE PER DART QSI 018 UNLESS
OTHERWISE NOTED

D2968-5 RING:

- 9) MATERIAL: AISI 4130N TUBING PER MIL-T-6736
OR AMS 6360/6361/6362/6371/6373/6374
(REF DART SPEC M4130NT3000W500)
- 10) ALL DIMENSIONS ARE IN INCHES
- 11) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED



D2968-5 RING



USE D2968-1 STEM
FOR -041
USE D2968-3 STEM
FOR -043

D2968-041 AND D2968-043 TOW RING:

- 12) WELD PER QSI 004 ON ALL EDGES BETWEEN STEM AND RING
- 13) HEAT TREAT TO MIN ULTIMATE TENSILE STRENGTH OF 125 KSI
- 14) FINISH: CAD PLATE ENTIRE ASSEMBLY PER
QQ-P-416F CLASS I TYPE II
POWDER COAT WHITE (REF 4.3.5.2) PER DART
QSI 005 4.3 (EXCEPT THREADS)

C	07.04.17	2.050 WAS 2.000, UPDATE NOTES
B	00.05.31	R0.125 AND R0.210 WERE 0.060 x 45°
A	00.03.07	NEW ISSUE
DESIGN	<i>[Signature]</i>	DRAWN BY <i>[Signature]</i>
CHECKED	<i>[Signature]</i>	APPROVED <i>[Signature]</i>
DATE	07.04.17	TOW RING

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DART DART AEROSPACE LTD.
HAMPSHIRE, ONTARIO, CANADA

DRAWING NO.
D2968
REV. C
SHEET 1 OF 1
SCALE
1:1

